

REMARKS

In the instant application, claims 1-10 are pending and have been made the subject of a Restriction Requirement.

I. Restriction Requirement under 35 U.S.C. § 121

The Examiner asserts that Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1, 6, 7 and 8 in part and claim 2, drawn to compounds where X is NR³⁰ and pharmaceutical compositions thereof, classified in class 544, subclasses 131, 370 and 405, class 546, subclasses 169 and 273.4 and class 548, subclasses 181, 235 and 307.4.
- II. Claims 1, 6, 7 and 8 in part and claim 3, drawn to compounds where X is S and pharmaceutical compositions thereof, classified in class 546, subclass 270.1 and class 548, subclass 125 and 163.
- III. Claims 1, 6, 7 and 8 in part, drawn to compounds where X is O and pharmaceutical compositions thereof, classified in class 548, subclass 222.
- IV. Claims 1, 6, 7 and 8 in part and claim 4, drawn to compounds where X is CH=CH and pharmaceutical compositions thereof, classified in class 546, subclass 159.
- V. Claims 1, 6, 7 and 8 in part and claim 5, drawn to compounds where X is N=CH and pharmaceutical compositions thereof, classified in class 544, subclass 356.
- VI. Claims 1, 6, 7 and 8 in part, drawn to compounds where X is CH=N and pharmaceutical compositions thereof, classified in class 544, subclass 292.
- VII. Claim 9, drawn to a method for the stimulation of the expression of endothelial NO synthase, classified in class 514, various subclasses.
- VIII. Claim 10, drawn to a method for the treatment of various diseases, classified in class 514, various subclasses.

Restriction Requirement, pages 2-3.

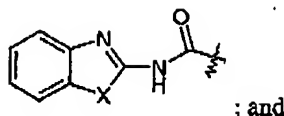
Applicants traverse the Restriction requirement. Applicants submit that the Restriction is improper for dividing Applicants' Markush claims 1-8 in contravention to the requirements of MPEP §803.02 and case law.

A. *MPEP §803.02 Considerations*

In particular, MPEP §803.02 provides that there is no basis for a Restriction of a Markush claimed invention where two factors are met, i.e.,

...compounds included within a Markush group (1) share a common utility and (2) share a substantial structural feature...

Applicants' Markush claimed invention meets the aforesaid factors. That is: (A) Their compounds have a substantial structural feature, i.e. the compound of formula



B) their compounds share a common utility, i.e., being useful for stimulating the expression of endothelial NO synthase, and for treating various cardiovascular diseases. Thus, the present Restriction Requirement is improper. There is also no proper basis for the present Restriction Requirement as the Examiner has failed to address the above two factors of MPEP §803.02 in making the Restriction Requirement.

B. Case Law Considerations

In *re Harnisch*, 206 U.S.P.Q. 300 (CCPA 1980) and cases related thereto, including *Ex parte Dahlen and Zwilgmeyer*, 42 U.S.P.Q. 208 (Bd. App., 1938), *Ex parte Brouard et al.*, 201 U.S.P.Q. 538 (Bd. App., 1976) and *Ex parte Holt and Randell*, 214 U.S.P.Q. 381, pertain to case law that does not support the present Restriction Requirement.

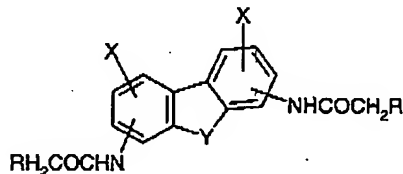
In re Harnisch, 206 U.S.P.Q. 300 (CCPA 1980)

In *re Harnisch*, 206 U.S.P.Q. 300 (CCPA 1980), the court found that an invention claimed in a Markush type claim was proper for compounds having a common utility and "a single structural similarity." Emphasis added by Applicants. Applicants' Markush claimed invention meets the standard of *Harnisch* as it indeed has the requisite single structural similarity (i.e. substantial structural feature from MPEP §803.02) and shares a common utility, as noted above. Therefore, there is no propriety for the present Restriction Requirement.

Furthermore, there is no proper basis for the present Election/Restriction as the Examiner has failed to address the above two factors of *Harnisch* in making the Election/Restriction requirement.

Ex parte Dahlen and Zwilgmeyer, 42 U.S.P.Q. 208 (Bd. App., 1938)

In addition, in *Ex parte Dahlen and Zwilgmeyer*, a Markush compound of formula



was found to be proper wherein Y was defined as a bivalent bridge radical that was further defined in Markush format consisting of the following 12 members, -CH₂-, -CO-, -C=C-, -CH₂CH₂-, -NH-, -N-alkyl-, -O-, -S-, -N=N-, -N=NO-, -SO₂- and -COCO-. Particularly noteworthy regarding that compound, was that the Markush grouping was found to be acceptable even though the variable Y provided for variations in the size and classes of tricyclic ring systems, i.e., the central ring could be defined to have a ring size of 5 or 6 that include a ring selected from a cyclopentadienyl ring, cyclohexadienyl ring, phenyl ring, or one of four different heteroaryl rings (pyrrolyl, furanyl, thienyl or pyridazinyl). As

Applicants' Markush claimed invention gives rise to less variability in the classes of compounds encompassed by its single structural similarity than those in *Ex parte Dahlen*, (i.e. only X varies between NR³⁰, O, S, CH=CH, N=CH and CH=N), the present Restriction Requirement is improper. In view of the aforesaid, Applicants submit that *Ex parte Dahlen and Zwilmeyer* supports that there is no basis for a Restriction Requirement in the instant case even though there is variability for the variable "X" in the single structural similarity of Applicants' claimed invention.

Ex parte Brouard et al., 201 U.S.P.Q. 538 (Bd. App. 1976)

Furthermore, *Ex parte Brouard et al.*, 201 U.S.P.Q. 538 (POBA 1976) states that "...the fact that different fields of search are involved does not establish that a Markush group is improper." In particular, six different fields of search were not sufficient to establish a proper Election/Restriction of the Markush group therein. Likewise, there being *only four different fields* (514, 544, 546 and 548) related to the presently restricted Groups I-VIII of the invention, such should not be viewed as providing a proper basis in support of the Restriction Requirement.

Furthermore, a search for the claimed compounds of Groups I is bound to reveal information concerning their preparation and use. Accordingly, performing the search covering the compounds, their preparation and the method of their use, i.e., Groups I-VIII, would not be a serious burden on the Examiner.

In view of the aforesaid comments regarding MPEP §803.02 and case law cited by Applicants, Applicants request that Applicants' specific arguments regarding the impropriety of the Restriction Requirement be specifically addressed on both the bases of MPEP §803.02 and case law, if the Restriction Requirement is maintained. Furthermore, Applicants request that they be provided with the opportunity to respond to any new bases, if any, made in support of the Restriction Requirement before the Restriction Requirement is made final.

II. Provisional Election

To comply with the Examiner's Restriction Requirement, Applicants provisionally elect, with traverse, Group II, claims 1, 6, 7 and 8 in part and claim 3, drawn to compounds where X is S and pharmaceutical compositions thereof.

Applicants submit that once the compounds of the present invention are found to be novel, then the other Groups defined by the Examiner where appropriate should be subject to rejoinder, pursuant to linking claim practice.

Applicants also affirm their right to file one or more divisional applications with respect to any other non-elected subject matter.

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AVENTIS US PAT DEPT

Docket No. NO. 9344 P. 6
Application No. 10/634,979

Respectfully submitted,



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